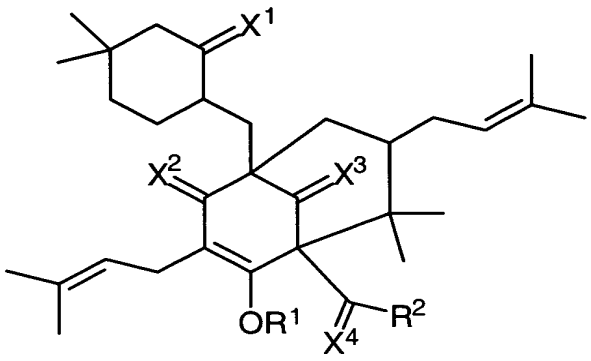
What is claimed is:

1. A compound of the formula (I)



(I)

wherein

R^1

is H, C_1-C_6-alkyl, C_2-C_6-alkenyl, C_2-C_6-alkynyl, or C_6-C_{14}-aryl,

in which alkyl, alkenyl, alkynyl and aryl are unsubstituted or mono- to tri-substituted by a radical R^3,

R^2

is C_1-C_6-alkyl, C_2-C_6-alkenyl, C_2-C_6-alkynyl, or C_6-C_{14}-aryl,

in which alkyl, alkenyl, alkynyl and aryl are unsubstituted or substituted n times by a radical R^3, where n is an integer from 1 to 3, and

R^3

is –OH, =O, –O-C_1-C_6-alkyl, –O-C_2-C_6-alkenyl, –O-C_6-C_{14}-aryl, –NH-C_1-C_6-alkyl, -NH-C_2-C_6-alkenyl, –NH[-C(=O)-(C_1-C_6-alkyl)], –NH[-C(=O)-(C_6-C_{14}-aryl)], –NH_2 or halogen, when R^1 and R^2 are each independently alkyl, alkenyl and alkynyl, and when R^1 and R^2 are each independently aryl, R^3 is –OH, –O-C_1-C_6-alkyl, –O-C_2-C_6-

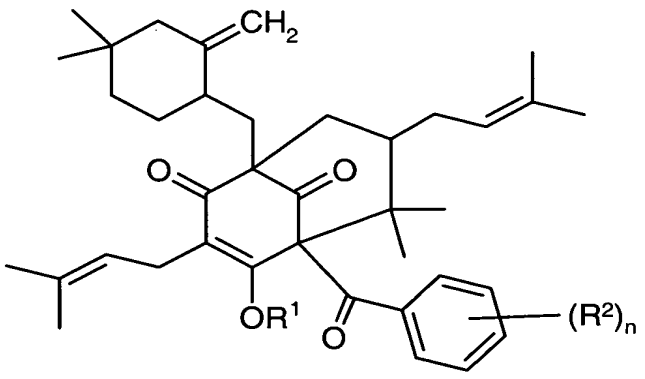
alkenyl, –O-C_6-C_{14}-aryl, –NH-C_1-C_6-alkyl, -NH-C_2-C_6-alkenyl, –NH[-C(=O)-(C_1-C_6-alkyl)], –NH[-C(=O)-(C_6-C_{14}-aryl)], –NH_2 or halogen, in which alkyl and alkenyl can be further substituted by –CN, –amide or –oxime functions, and aryl can be further substituted by –CN or –amide functions,

X^1 is CH_2 or O,

X^2, X^3 and X^4 independently of one another are O, NR^1 or S,
wherein R^1 is as previously defined,

or a stereoisomeric form of the compound of the formula (I) or a mixture of stereoisomers of a compound of the formula (I) in any ratio, or a physiologically tolerable salt of a compound of the formula (I) or a physiologically tolerable salt of a stereoisomeric form of a compound of the formula (I).

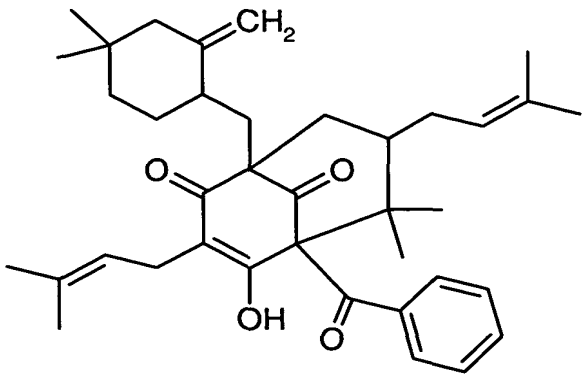
2. The compound according to claim 1 which is the compound of formula (II)



(II)

wherein R^1 R^2 and n are as previously defined.

3. The compound according to claim 2, which is the compound of formula (III)

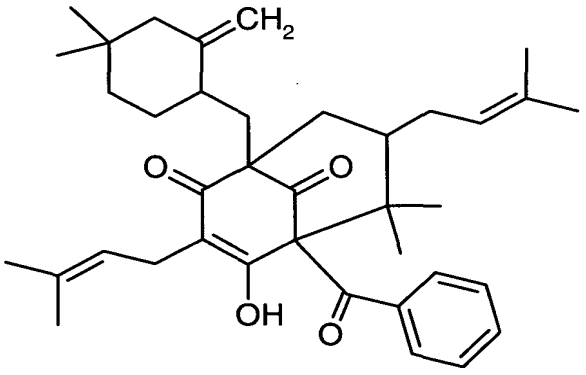


(III).

4. A process for the preparation of a compound of the formula (I) according to claim 1 comprising:

(a) extracting parts of the plant Garcinia punctata or one of its variants and/or mutants,

(b) isolating and optionally purifying a compound of the formula (III),



(III)

(c) derivatizing the compound of the formula (III), if appropriate using a suitable reagent, to give a compound of the formula (I) and,

(d) converting the compound of the formula (I), if appropriate, into a pharmacologically tolerable salt.

5. The process according to claim 4 for the preparation of a compound of the formula (III) comprising:

(a) extracting parts of the plant Garcinia punctata or one of its variants and/or mutants,

(b) isolating and optionally purifying a compound of the formula (III), and

(c) converting the compound of the formula (III), if appropriate, into a pharmacologically tolerable salt.

6. A compound as claimed in claim 1 for the use as a pharmaceutical.

7. A method for the treatment or prophylaxis of bacterial infections comprising administering to a patient in need of said treatment an effective amount of a compound according to claim 1 or a pharmacologically tolerable salt thereof.

8. A pharmaceutical composition comprising a compound of claim 1 or a pharmacologically tolerable salt thereof and one or more physiologically acceptable excipients.

9. A process for the production of a pharmaceutical composition as claimed in claim 8, comprising bringing a compound of the formula I, or a pharmacologically tolerable salt thereof, into a suitable administration form using one or more physiologically suitable excipients.